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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,034	08/04/2003	Osamu Izaki	9976-18US (OB0042US)	7281
570. 7590 10/15/2008 PANITCH SCHWARZE BELISARIO & NADEL LLP ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200 PHILADELPHIA, PA 19103				
EXAMINER				
DICKERSON, CHAD S				
ART UNIT		PAPER NUMBER		
2625				
MAIL DATE		DELIVERY MODE		
10/15/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/635,034

Applicant(s)

IZAKI, OSAMU

Examiner

CHAD DICKERSON

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 July 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-6, 8-16 and 18-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-6, 8-16 and 18-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/4/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 8, filed 7/21/2008, with respect to the claim objections have been fully considered and are persuasive. The objections of the claims have been withdrawn.
2. Applicant's arguments with respect to claims 4-6, 8-16 and 18-35 have been considered but are moot in view of the new ground(s) of rejection. The new ground(s) of rejection is necessitated by the Amendment to the claims. However, the reference of Roosen '793 is still being applied to claim 5 and the independent claims that contain the claim limitation of claim 5. The Examiner respectfully disagrees with the assertions that Roosen does not disclose the features of (1) print instruction data which includes information of another external apparatus or (2) transferring any print data (i.e. data to be printed) from a printing apparatus to an external apparatus.

When looking at the reference of Roosen, the Examiner would like to bring the Applicant's attention to paragraph [0108]. Here, the paragraph discloses that the user enters in data instructing the current printing system to transfer job data to another printer and have the other printing device perform printing on the print job. The Examiner considered the user instructing the current printer to transfer a job to another printer for printing as print instructions data that includes information of another printing device for job transfer and printing. Once the user uses this function, the print job is transferred to another printer in the system. Since the above embodiment can occur in the system of printers with embedded web-servers, the function of the above is

performed when the printer detects that the user instructs a transfer of print data to another printer in the system and the job is transferred to another printer.

Regarding the feature of “wherein the print data of only a first page is converted, the first page being the first sheet in plural sheets”, the Examiner would like to note figure 8 that shows a page converted that is being previewed by the user in the reference of Estavillo ‘238. However, the reference does not specifically of having this image to be one of many sheets that is converted for preview. This is clearly introduced with the newly applied reference of Nakagiri ‘359 (see figures 17 and 18 in Nakagiri).

Claim Objections

3. Claims 4-6, 8-16 and 18-35 are objected to because of the following informalities:
 - Re claims 21 and 22: the following claims contain dependent claims that do not refer to a preceding claim. Therefore, it is suggested that claim 21 be written in the place of claim 1 in order to have the above claims depend on an independent claim in a manner in which the dependent claims depend on a preceding claim. It is also suggested that claims 5 and 6 be numbered in a manner to depend on a preceding claim. Claims dependent on the independent claims are also objected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4, 8-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793 (US Pub No 2002/0036793) in view of Estavillo '238 (US Pub No 2002/0046238).

Re claim 4: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus of claim 21 and wherein the print data of only a first page is converted.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein the print data of only a first page is converted (i.e. since the print job is rendered into a print preview format and a page reflecting the job is developed, if the print job is only one page, the system will develop a print preview of that one page and send it to the user's computer. The image that is to be printed is previewed and this may include more than one image; see figs. 2-6; paragraphs [0053]-[0064]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made have the printing apparatus wherein the print data of only a first page is converted in order to have as the preview is generated by the printer and accessed by the web browser, the preview may be received by any client platform (as stated in Estavillo '238 paragraph [0050]).

Re claim 8: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above. Roosen '793 discloses the printing apparatus of claim 21, said printing apparatus detecting whether information of storage designation or print designation exists in the print data received from said external apparatus or not (i.e. when the printer receives a print job, the digital access controller (DAC) detects whether the print job is in a designation of an interactive or automatic print mode. If the automatic print mode is detected to be designated, the print job is directly printed once the print job is reached in the queue, or if a print job is in interactive mode, the print job is designated to be stored in the printer's storage unit; see figs. 1-4 and 7-9; paragraphs [0019]-[0033]); and printing said print data irrespective of said print instruction data if said information indicates the print designation (i.e. if the print job is designated to be in automatic print mode, the print job is printed automatically, this is analogous to the printing happening irrespective of the print instruction data because the print job is printed once the print job is designated to be in automatic mode; see figs. 1-4 and 7-9; paragraphs [0019]-[0033]).

Re claim 9: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above. Roosen '793 discloses the printing apparatus of claim 21, said printing apparatus receiving authentication data from said external apparatus and storing said authentication data (i.e. the printer containing a web server or the web server, represented in figures 2b and 2c, are both systems that receive authentication data from a computer in order to authenticate a user. Although an a storage unit for storing the

authentication data is not specifically disclosed, a password and a login is believed to be stored in the system because in order to match the user's login and password to the data that will allow them to gain access, these pieces of authorization data has to be stored somewhere in the system. Since the security code information is stored along with the file that represents a print job, the feature of having the authentication data stored is performed; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]);

comparing authentication data included in the data which is transmitted from said external apparatus with said stored authentication data (i.e. the system compares the authentication data, or security code, with the code sent with the actual print job in the system. The security code, with the print job, is transmitted to the printer from the user PC, considered as the external apparatus; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]); and

executing a process corresponding to said received data if said data coincide as a result of said comparison (i.e. when a user wants a print job printed that is in interactive mode, the user, or operator, has to enter in a code in order to gain access to the file. Once the correct security code is verified by the system, the user may now print the interactive print file; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]).

Re claim 10: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 9, wherein the authentication data which is compared is user data (i.e. the authentication data used in

the system compared is login data, considered as user data, that is personalized for the specific user; see fig. 14; paragraphs [0099]-[0110]).

Re claim 11: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 9, wherein the authentication data which is compared is password data (i.e. the authentication data used in the system compared is the password, which is used with the login data, that is personalized for the user to authenticate the user; see fig. 14; paragraphs [0099]-[0110]).

Re claim 12: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 21, wherein a predetermined character train included in said received data is detected (i.e. shown in figure 8, the information regarding the print jobs is received by the printer and stored in the printer's storage unit. The information is represented by information analogous to a predetermined character train that describes the type of print job, the job owner, the job name and number of copies associated with the print job. Once the print job is sent to the printer, all the above information is detected; see figs. 7 and 8; paragraphs [0040]-[0075]).

Re claim 13: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 21, wherein the information is transmitted to said external apparatus by E-mail (i.e. the e-mail, in the broadest sense is an electronic message sent as a signal from one destination to another. When the user's PC constantly inquires the printer about information regarding the print job, an electronic message on the server's web page is displayed to show the pending print jobs in the print queue and the interactive jobs that are stored on all printers that will not be printed unless designated. The web page displays an electronic information and sends this information to the user PC and is displayed on the user PC through the desktop software. This information sent to the user PC to be displayed is analogous to the server sending e-mail information to the user PC; see figs. 2b, 2c, 14-16; paragraphs [0099]-[0110]).

Re claim 14: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 21, E-mail transmitted by said external apparatus is received (i.e. the e-mail, in the broadest sense is an electronic message sent as a signal from one destination to another. The printer receives electronic information from the user PC when the user wishes to print an interactive print job. The user PC sends, or transmits, electronic information through the

desktop software to the printer digital access controller to inform the printer of the printing of the interactive print job; see figs. 2b, 2c, 14-16; paragraphs [0099]-[0110]).

Re claim 15: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 21, wherein information which can identify each of said stored print data is formed (i.e. the information sent to the printer from the user PC forms information regarding the print data and this print data is stored in the storage unit of the printer. This information can be displayed on the user PC through the desktop software that identifies the print data that is stored on printer. This information is formed and displayed to the user; see figs. 8, 9 and 14-16; paragraphs [0040]-[0075] and [0099]-[0110]).

Re claim 16: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 15, wherein the identification information is a job number (i.e. the job control frame (50) shown in figure 15 shows the interactive print jobs and the print jobs in the print queue. The printer saves both types of jobs. The information is personalized for the user and figure 15 shows a job number representing both types of print jobs within the job control frame; see fig. 14-16; paragraphs [0099]-[0110]).

Re claim 18: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 21 wherein said image data format is a JPEG format.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein said image data format is a JPEG format (i.e. in the system, the preview data can be encoded in JPEG format; see paragraph [0057]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein said image data format is a JPEG format in order to have an image encoded in JPEG format (as stated in Estavillo '238 paragraph [0057]).

Re claim 21: Roosen '793 discloses a printing apparatus comprising:

a receiving unit which receives data from a host (i.e. the Digital Access Controller (DAC) receives information from the workstation, or user PC, to be stored in the printer; see figs. 1 and 2; paragraphs [0019]-[0030]);

a transmitting unit which transmits data to the host (i.e. the communication software in the DAC allow the printer to send and receive information to the workstation, or the user PC; see figs. 1 and 2; paragraphs [0019]-[0030]);

a print unit which prints print data onto a medium (i.e. the printer in the system has a print function, which prints data on a print medium; see figs. 1 and 2; paragraphs [0019]-[0030]);

an analyzing unit which analyzes the data received from said host (i.e. the DAC, which processes files sent to the printer, analyzes the data received to determine the attribute of the file, which determines if the file is an interactive or an automatic print job; see figs. 1 and 2; paragraphs [0019]-[0030]);

a storing unit which stores said print data if a result of said analysis indicates the print data (i.e. if the analysis of the print data determines that the print data is an interactive print job, then the print data is stored in a storage unit. If the print job is recognized to be an automatic print job, it is also stored in a storage unit, but the storage unit is a queue for the printer; see figs. 1 and 2; paragraphs [0019]-[0030]);

a list forming unit which forms a list of the print data stored in said storing unit and outputs said list of the print data to said transmitting unit if the result of said analysis indicates inquiry data (i.e. the workstation, or user PC, always inquires or queries the printer for the information regarding the stored print jobs. A list is formed and sent to the DAC of the printer, so that the lists of print jobs in the automatic and interactive types are output to the workstation or user PC. This list is given to the user in order for the user to decide which print jobs for a certain designated printer to perform. Although a list unit is not specifically disclosed, the feature is clearly performed; see figs. 1 and 2; paragraphs [0019]-[0030], [0040]-[0075] and [0099]-[0110]);

a print instructing unit which, if the result of said analysis indicates print instruction data, outputs said print data stored in said storing unit to said print unit on the basis of said print instruction data (i.e. if a print job is recognized, or analyzed, by the DAC as being an automatic print job, then the print job is stored in a queue until the

printer reaches that print job in the queue and prints the print job. Also, if a user desires to change an interactive print job to an automatic print job to have the job printed, the user would simply change to type of the job. Once the user changes the type of the job to automatic, the print job is taken out of the storage unit of the printer and placed in the print queue for the printer to perform a print job based on the print instruction; see figs. 1, 2, 7, 8, 15 and 16; paragraphs [0019]-[0030], [0040]-[0075] and [0099]-[0110]); and said printing apparatus detecting that information of another external apparatus is included in said print instruction data (i.e. since the system can have print jobs sent to any printer in the system, the feature of having a print job sent to another apparatus is performed. Also, with the system being able to perform the above feature, the system uses a web server to relay information from the desktop software to the network. The server, which can be embedded in a respective printer, is able to recognize, or detect, the other printing apparatus included in the printing data instruction of an interactive print job and distribute the print job to the designated printer; see figs. 1, 2, 15 and 16; paragraphs [0019]-[0023] and [0099]-[0110]); and

transferring the print data instructed by said print instruction data to said another external apparatus if the information of said another external apparatus is included in the print instruction data (i.e. the user can interact with print job settings, which can enable a user to transfer print jobs to other apparatuses. In the system, with the use of button (56) on figure 15, the user transfers print data to another printer. In order to transfer print data to another printer, the information of another printing device has to be included in the instruction in order for the printing system to know what other printing

device is to receive the print job; see figs. 14-16; paragraphs [0019]-[0023] and [0099]-[0110]).

However, Roosen '793 fails to teach a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host, the image data being stored into the storing unit in an interlocking relation with said print data and the transmitting unit transmitting the image data if said inquiry data is received.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host (i.e. in the system, the print data sent to the printer is converted into a print preview by the preview generating unit on the printer (401). This preview data, considered as the image data, can be displayed on a user's computer (403) through a web browser (402); see fig. 3-6; paragraphs [0049] and [0050]),

the image data being stored into the storing unit in an interlocking relation with said print data (i.e. in the system, when a user wishes to preview a print job that is present on the print queue, the system searches for the preview of the print job in the data repository. The preview generator and the manager module are both apart of unit (207). These two functions work together to create a preview of the print jobs located on the queue. Once the print preview is generated, it is stored in the file system (503) on the printer and the print preview is directly connected or in correspondence with the image data to be printed; see figs. 2-6; paragraphs [0053]-[0064]) and

the transmitting unit transmitting the image data if said inquiry data is received (i.e. the printer's web server is used to send the print preview of the image data to the host computer. The user's computer has to send a request to the web server identifying the print job that is requested to be previewed. This request can be considered as inquiry data; see figs. 2-6; paragraphs [0053] and [0064]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the functions of a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host, the image data being stored into the storing unit in an interlocking relation with said print data and the transmitting unit transmitting the image data if said inquiry data is received in order to have as the preview is generated by the printer and accessed by the web browser, the preview may be received by any client platform (as stated in Estavillo '238 paragraph [0050]).

6. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793, as modified by Estavillo '238, as applied to claim 21 above, and further in view of Treptow '564 (US Pub No 2002/0138564).

Re claim 19: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 21 wherein said image data format is a PDF format.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein said image data format is a format (i.e. in the system, the preview data can be encoded in JPEG format; see paragraph [0057]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein said image data format is a format in order to have an image encoded in JPEG format (as stated in Estavillo '238 paragraph [0057]).

However, Roosen '793 in view of Estavillo '238 fails to teach PDF format.

However, this is well known in the art as evidenced by Treptow '564. Treptow '564 discloses PDF format (i.e. in the system, supported types of data that present at the printer is PDF. With the use of the PDF format incorporated in the device of Roosen '793 modified by Estavillo '238, the above feature is performed; see paragraph [0039]).

Therefore, in view of Treptow '564, it would have been obvious to one of ordinary skill at the time the invention was made to have PDF format in order to support PDF type input data (as stated in Treptow '564 paragraph [0039]).

Re claim 20: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 21 wherein the transmitting of the information regarding the print data stored in said storing unit is done by way of an email, and the transmitting of the image data is done by way of an attachment to the email.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein the transmitting of the information regarding the print data stored in said storing unit is done (i.e. in the system, the information regarding the fonts, color conversions and other printer settings are sent to the user through the information reflecting the print preview. The above information is stored in the data repository (501) in the printer; see figs. 2-6; paragraphs [0053] and [0064]), and the transmitting of the image data is done (i.e. in the system, the print preview image, considered as the image data is transmitted to the user's computer and the print preview image is stored in the filing system in the printer; see figs. 2-6; paragraphs [0053] and [0064]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein the transmitting of the information regarding the print data stored in said storing unit is done, and the transmitting of the image data is done in order to have as the preview is generated by the printer and accessed by the web browser, the preview may be received by any client platform (as stated in Estavillo '238 paragraph [0050]).

However, Roosen '793 in view of Estavillo '238 fails to teach by way of an email and by way of an attachment to the email.

However, this is well known in the art as evidenced by Treptow '564. Treptow '564 discloses by way of an email (i.e. the system discloses distributing input data in the form of an email; see paragraph [0039]) and by way of an attachment to the email (i.e. the system discloses distributing information in the form of an email attachment. With the above feature of transmitting information through email and email attachment

incorporated in the device of Roosen '793 modified by Estavillo '238, the above feature is performed; see paragraph [0039]).

Therefore, in view of Treptow '564, it would have been obvious to one of ordinary skill at the time the invention was made to the methods steps of transmitting information by way of an email and by way of an attachment to the email in order to have a system that allows input data sent in the form of an email or email attachment (as stated in Treptow '564 paragraph [0039]).

7. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793, as modified by the features of Estavillo '238, as applied to claim 21 above, and further in view of Kayano '747 (USP 5812747).

Re claim 26: The teachings of Roosen '793 in view of Estavillo '238 are disclosed above.

However, the references of Roosen '793 and Estavillo '238 and Nakagiri '359 fail to specifically teach the printing apparatus as claimed in claim 21, the printing apparatus receiving a reply from said another external apparatus if the information of said another external apparatus is included.

However, this is well known in the art as evidenced by Kayano '747. Kayano '747 discloses receiving a reply from said another external apparatus if the information of said another external apparatus is included (i.e. the system of Kayano is similar to the system of Roosen in the function of having printing devices have the capability of transferring image data for processing from one printing device to another. However,

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the function of Kayano allows for a main copier to receive a reply from other interconnected copiers when the main copier includes information of the other interconnected printers in the interconnected copying request. The above is an example of receiving a reply by the main copier from another external apparatus if the information of the other apparatus is included in the interconnected request; see col. 7, ln 50 - col. 8, ln 48).

Therefore, in view of Kayano '747, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of receiving a reply from said another external apparatus if the information of said another external apparatus is included, incorporated in the device of Roosen, as modified by the features of Estavillo and Nakagiri, in order to have a printing device send image data to other apparatuses for printing (as stated in Kayano '747 col. 8, ln 27-48).

8. Claims 5, 22, 23 and 27-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793 in view of Estavillo '238 and Nakagiri '359 (USP 6616359).

Re claim 5: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus of claim 22, said printing apparatus detecting that information of another external apparatus is included in said print instruction data (i.e. since the system can have print jobs sent to any printer in the

system, the feature of having a print job sent to another apparatus is performed. Also, with the system being able to perform the above feature, the system uses a web server to relay information from the desktop software to the network. The server, which can be embedded in a respective printer, is able to recognize, or detect, the other printing apparatus included in the printing data instruction of an interactive print job and distribute the print job to the designated printer; see figs. 1, 2, 15 and 16; paragraphs [0019]-[0023] and [0099]-[0110]); and

transferring the print data instructed by said print instruction data to said another external apparatus if the information of said another external apparatus is included (i.e. the user can interact with print job settings, which can enable a user to transfer print jobs to other apparatuses. In the system, with the use of button (56) on figure 15, the user transfers print data to another printer. In order to transfer print data to another printer, the information of another printing device has to be included in the instruction in order for the printing system to know what other printing device is to receive the print job; see figs. 14-16; paragraphs [0019]-[0023] and [0099]-[0110]).

Re claim 22: Roosen '793 discloses a printing apparatus comprising:

a receiving unit which receives data from a host (i.e. the Digital Access Controller (DAC) receives information from the workstation, or user PC, to be stored in the printer; see figs. 1 and 2; paragraphs [0019]-[0030]);

a transmitting unit which transmits data to the host (i.e. the communication software in the DAC allow the printer to send and receive information to the workstation, or the user PC; see figs. 1 and 2; paragraphs [0019]-[0030]);

a print unit which prints print data onto a medium (i.e. the printer in the system has a print function, which prints data on a print medium; see figs. 1 and 2; paragraphs [0019]-[0030]);

an analyzing unit which analyzes the data received from said host (i.e. the DAC, which processes files sent to the printer, analyzes the data received to determine the attribute of the file, which determines if the file is an interactive or an automatic print job; see figs. 1 and 2; paragraphs [0019]-[0030]);

a storing unit which stores said print data if a result of said analysis indicates the print data (i.e. if the analysis of the print data determines that the print data is an interactive print job, then the print data is stored in a storage unit. If the print job is recognized to be an automatic print job, it is also stored in a storage unit, but the storage unit is a queue for the printer; see figs. 1 and 2; paragraphs [0019]-[0030]);

a list forming unit which forms a list of the print data stored in said storing unit and outputs said list of the print data to said transmitting unit if the result of said analysis indicates inquiry data (i.e. the workstation, or user PC, always inquires or queries the printer for the information regarding the stored print jobs. A list is formed and sent to the DAC of the printer, so that the lists of print jobs in the automatic and interactive types are output to the workstation or user PC. This list is given to the user in order for the user to decide which print jobs for a certain designated printer to perform. Although

a list unit is not specifically disclosed, the feature is clearly performed; see figs. 1 and 2; paragraphs [0019]-[0030], [0040]-[0075] and [0099]-[0110]);

a print instructing unit which, if the result of said analysis indicates print instruction data, outputs said print data stored in said storing unit to said print unit on the basis of said print instruction data (i.e. if a print job is recognized, or analyzed, by the DAC as being an automatic print job, then the print job is stored in a queue until the printer reaches that print job in the queue and prints the print job. Also, if a user desires to change an interactive print job to an automatic print job to have the job printed, the user would simply change to type of the job. Once the user changes the type of the job to automatic, the print job is taken out of the storage unit of the printer and placed in the print queue for the printer to perform a print job based on the print instruction; see figs. 1, 2, 7, 8, 15 and 16; paragraphs [0019]-[0030], [0040]-[0075] and [0099]-[0110]); and said printing apparatus detecting that information of another external apparatus is included in said print instruction data (i.e. since the system can have print jobs sent to any printer in the system, the feature of having a print job sent to another apparatus is performed. Also, with the system being able to perform the above feature, the system uses a web server to relay information from the desktop software to the network. The server, which can be embedded in a respective printer, is able to recognize, or detect, the other printing apparatus included in the printing data instruction of an interactive print job and distribute the print job to the designated printer; see figs. 1, 2, 15 and 16; paragraphs [0019]-[0023] and [0099]-[0110]); and

transferring the print data instructed by said print instruction data to said another external apparatus if the information of said another external apparatus is included in the print instruction data (i.e. the user can interact with print job settings, which can enable a user to transfer print jobs to other apparatuses. In the system, with the use of button (56) on figure 15, the user transfers print data to another printer. In order to transfer print data to another printer, the information of another printing device has to be included in the instruction in order for the printing system to know what other printing device is to receive the print job; see figs. 14-16; paragraphs [0019]-[0023] and [0099]-[0110]).

However, Roosen '793 fails to teach a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host, the image data being stored into the storing unit in an interlocking relation with said print data and the transmitting unit transmitting the image data if said inquiry data is received, wherein the print data of only a first page is converted, the first page being the first sheet in plural sheets.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host (i.e. in the system, the print data sent to the printer is converted into a print preview by the preview generating unit on the printer (401). This preview data, considered as the image data, can be displayed on a user's computer (403) through a web browser (402); see fig. 3-6; paragraphs [0049] and [0050]),

the image data being stored into the storing unit in an interlocking relation with said print data (i.e. in the system, when a user wishes to preview a print job that is present on the print queue, the system searches for the preview of the print job in the data repository. The preview generator and the manager module are both apart of unit (207). These two functions work together to create a preview of the print jobs located on the queue. Once the print preview is generated, it is stored in the file system (503) on the printer and the print preview is directly connected or in correspondence with the image data to be printed; see figs. 2-6; paragraphs [0053]-[0064]) and

the transmitting unit transmitting the image data if said inquiry data is received (i.e. the printer's web server is used to send the print preview of the image data to the host computer. The user's computer has to send a request to the web server identifying the print job that is requested to be previewed. This request can be considered as inquiry data; see figs. 2-6; paragraphs [0053] and [0064]),

wherein the print data of only a first page is converted (i.e. since the print job is rendered into a print preview format and a page reflecting the job is developed, if the print job is only one page, the system will develop a print preview of that one page and send it to the user's computer. The image that is to be printed is previewed and this may include more than one image; see figs. 2-6; paragraphs [0053]-[0064]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the functions of a converting unit which converts a portion of said print data it into an image data format in which the print data can be displayed by said host, the image data being stored into the storing unit in an

interlocking relation with said print data and the transmitting unit transmitting the image data if said inquiry data is received in order to have as the preview is generated by the printer and accessed by the web browser, the preview may be received by any client platform (as stated in Estavillo '238 paragraph [0050]).

However, Roosen '793 and Estavillo '238 fail to specifically teach the first page being the first sheet in plural sheets.

However, this is well known in the art as evidenced by Nakagiri '359. Nakagiri '359 discloses the first page being the first sheet in plural sheets (i.e. the invention of Nakagiri is similar to the invention of Roosen in the manner in which both inventions involve a computer sending information to be printed to a printer. However, as shown in figure 17 of Nakagiri, the invention can convert one image for display that is apart of many pages in a printer job, as reflected in figure 18. Therefore, the system of Nakagiri combined with the features of Roosen, as modified by the features of Estavillo, the overall system is able to display a page in a document that consists of many pages; see figs. 17 and 18; col. 8, ln 24-31 and col. 19, ln 41-64).

Therefore, in view of Nakagiri '359, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of wherein the print data of only a first page is converted, the first page being the first sheet in plural sheets, incorporated in the device of Roosen, as modified by the features of Estavillo, in order to display jobs as preview images (as stated in Nakagiri '359 col. 1, ln 60-64).

Re claim 23: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 22 wherein said image data format is a JPEG format.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein said image data format is a JPEG format (i.e. in the system, the preview data can be encoded in JPEG format; see paragraph [0057]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein said image data format is a JPEG format in order to have an image encoded in JPEG format (as stated in Estavillo '238 paragraph [0057]).

Re claim 27: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus of claim 22, said printing apparatus detecting whether information of storage designation or print designation exists in the print data received from said external apparatus or not (i.e. when the printer receives a print job, the digital access controller (DAC) detects whether the print job is in a designation of an interactive or automatic print mode. If the automatic print mode is detected to be designated, the print job is directly printed once the print job is reached in the queue, or if a print job is in interactive mode, the print job is designated to be stored in the printer's storage unit; see figs. 1-4 and 7-9; paragraphs [0019]-[0033]); and

printing said print data irrespective of said print instruction data if said information indicates the print designation (i.e. if the print job is designated to be in automatic print mode, the print job is printed automatically, this is analogous to the printing happening irrespective of the print instruction data because the print job is printed once the print job is designated to be in automatic mode; see figs. 1-4 and 7-9; paragraphs [0019]-[0033]).

Re claim 28: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus of claim 22, said printing apparatus:

receiving authentication data from said external apparatus and storing said authentication data (i.e. the printer containing a web server or the web server, represented in figures 2b and 2c, are both systems that receive authentication data from a computer in order to authenticate a user. Although an a storage unit for storing the authentication data is not specifically disclosed, a password and a login is believed to be stored in the system because in order to match the user's login and password to the data that will allow them to gain access, these pieces of authorization data has to be stored somewhere in the system. Since the security code information is stored along with the file that represents a print job, the feature of having the authentication data stored is performed; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]);

comparing authentication data included in the data which is transmitted from said external apparatus with said stored authentication data (i.e. the system compares the

authentication data, or security code, with the code sent with the actual print job in the system. The security code, with the print job, is transmitted to the printer from the user PC, considered as the external apparatus; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]); and

executing a process corresponding to said received data if said data coincide as a result of said comparison (i.e. when a user wants a print job printed that is in interactive mode, the user, or operator, has to enter in a code in order to gain access to the file. Once the correct security code is verified by the system, the user may now print the interactive print file; see fig. 14; paragraphs [0028]-[0031] and [0099]-[0110]).

Re claim 29: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 28, wherein the authentication data which is compared is user data (i.e. the authentication data used in the system compared is login data, considered as user data, that is personalized for the specific user; see fig. 14; paragraphs [0099]-[0110]).

Re claim 30: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 28, wherein the authentication data which is compared is password data (i.e. the authentication data used in the system compared is the password, which is used with the login data, that is

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personalized for the user to authenticate the user; see fig. 14; paragraphs [0099]-[0110]).

Re claim 31: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 22, wherein a predetermined character train included in said received data is detected (i.e. shown in figure 8, the information regarding the print jobs is received by the printer and stored in the printer's storage unit. The information is represented by information analogous to a predetermined character train that describes the type of print job, the job owner, the job name and number of copies associated with the print job. Once the print job is sent to the printer, all the above information is detected; see figs. 7 and 8; paragraphs [0040]-[0075]).

Re claim 32: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 22, the information is transmitted to said external apparatus by E-mail (i.e. the e-mail, in the broadest sense is an electronic message sent as a signal from one destination to another. When the user's PC constantly inquires the printer about information regarding the print job, an electronic message on the server's web page is displayed to show the pending print jobs in the print queue and the interactive jobs that are stored on all printers that will not

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be printed unless designated. The web page displays an electronic information and sends this information to the user PC and is displayed on the user PC through the desktop software. This information sent to the user PC to be displayed is analogous to the server sending e-mail information to the user PC; see figs. 2b, 2c, 14-16; paragraphs [0099]-[0110]).

Re claim 33: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 22, E-mail transmitted by said external apparatus is received (i.e. the e-mail, in the broadest sense is an electronic message sent as a signal from one destination to another. The printer receives electronic information from the user PC when the user wishes to print an interactive print job. The user PC sends, or transmits, electronic information through the desktop software to the printer digital access controller to inform the printer of the printing of the interactive print job; see figs. 2b, 2c, 14-16; paragraphs [0099]-[0110]).

Re claim 34: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 22, information which can identify each of said stored print data is formed (i.e. the information sent to the printer from the user PC forms information regarding the print data and this print data is stored in the storage unit of the printer. This information can be displayed on the user

PC through the desktop software that identifies the print data that is stored on printer. This information is formed and displayed to the user; see figs. 8, 9 and 14-16; paragraphs [0040]-[0075] and [0099]-[0110]).

Re claim 35: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus according to claim 34, wherein the identification information is a job number (i.e. the job control frame (50) shown in figure 15 shows the interactive print jobs and the print jobs in the print queue. The printer saves both types of jobs. The information is personalized for the user and figure 15 shows a job number representing both types of print jobs within the job control frame; see fig. 14-16; paragraphs [0099]-[0110]).

9. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793, as modified by Estavillo '238 and Nakagiri '359, as applied to claim 22 above, and further in view of Treptow '564 (US Pub No 2002/0138564).

Re claim 24: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 22 wherein said image data format is a PDF format.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein said image data format is a format (i.e. in the system, the preview data can be encoded in JPEG format; see paragraph [0057]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein said image data format is a format in order to have an image encoded in JPEG format (as stated in Estavillo '238 paragraph [0057]).

However, Roosen '793 in view of Estavillo '238 fails to teach PDF format.

However, this is well known in the art as evidenced by Treptow '564. Treptow '564 discloses PDF format (i.e. the system of Treptow '564 is similar to the system of Roosen in the manner in which both systems transmit information from host devices and computers to printers. However, in Treptow, a supported type of data that is present at the printer is PDF. With the use of the PDF format incorporated in the device of Roosen '793 modified by Estavillo '238 and Nakagiri '359, the above feature is performed; see paragraph [0039]).

Therefore, in view of Treptow '564, it would have been obvious to one of ordinary skill at the time the invention was made to have PDF format in order to support PDF type input data (as stated in Treptow '564 paragraph [0039]).

Re claim 25: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

However, Roosen '793 fails to teach the printing apparatus as claimed in claim 22 wherein the transmitting of the information regarding the print data stored in said storing unit is done by way of an email, and the transmitting of the image data is done by way of an attachment to the email.

However, this is well known in the art as evidenced by Estavillo '238. Estavillo '238 discloses wherein the transmitting of the information regarding the print data stored in said storing unit is done (i.e. in the system, the information regarding the fonts, color conversions and other printer settings are sent to the user through the information reflecting the print preview. The above information is stored in the data repository (501) in the printer; see figs. 2-6; paragraphs [0053] and [0064]), and the transmitting of the image data is done (i.e. in the system, the print preview image, considered as the image data is transmitted to the user's computer and the print preview image is stored in the filing system in the printer; see figs. 2-6; paragraphs [0053] and [0064]).

Therefore, in view of Estavillo '238, it would have been obvious to one of ordinary skill at the time the invention was made to have the method step of wherein the transmitting of the information regarding the print data stored in said storing unit is done, and the transmitting of the image data is done in order to have as the preview is generated by the printer and accessed by the web browser, the preview may be received by any client platform (as stated in Estavillo '238 paragraph [0050]).

However, Roosen '793 in view of Estavillo '238 fails to teach by way of an email and by way of an attachment to the email.

However, this is well known in the art as evidenced by Treptow '564. Treptow '564 discloses by way of an email (i.e. the system discloses distributing input data in the form of an email; see paragraph [0039]) and by way of an attachment to the email (i.e. the system discloses distributing information in the form of an email attachment. With the above feature of transmitting information through email and email attachment incorporated in the device of Roosen '793 modified by Estavillo '238, the above feature is performed; see paragraph [0039]).

Therefore, in view of Treptow '564, it would have been obvious to one of ordinary skill at the time the invention was made to the methods steps of transmitting information by way of an email and by way of an attachment to the email in order to have a system that allows input data sent in the form of an email or email attachment (as stated in Treptow '564 paragraph [0039]).

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roosen '793, as modified by the features of Estavillo '238 and Nakagiri '359, as applied to claim 22 above, and further in view of Kayano '747.

Re claim 6: The teachings of Roosen '793 in view of Estavillo '238 and Nakagiri '359 are disclosed above.

Roosen '793 discloses the printing apparatus of claim 22, said printing apparatus

detecting that information of another external apparatus is included in said print instruction data (i.e. shown in figure 2b, the web server acts as the liaison between the

user workstation and the printer. The web server detects the information of a print job and whether the print job designates other printers within the print job instruction. When the user utilizes button (56) to transfer a print job to another printing device, the current printer detects the other designated printer in the print instruction data instructing for the transfer of the print job. The web server performs the feature of detecting if information of a print instruction for another external apparatus is included in the print job instruction data and since the web server can be embedded in a current printer, the printing device can perform the above function; see figs. 1, 2 and 14-16; paragraphs [0099]-[0110]).

However, the references of Roosen '793 and Estavillo '238 fail to specifically teach receiving a reply from said another external apparatus if the information of said another external apparatus is included; and transferring the print data instructed by said print instruction data to said another external apparatus if said reply is received.

However, this is well known in the art as evidenced by Kayano '747. Kayano '747 discloses receiving a reply from said another external apparatus if the information of said another external apparatus is included (i.e. the system of Kayano is similar to the system of Roosen in the function of having printing devices have the capability of transferring image data for processing from one printing device to another. However, the function of Kayano allows for a main copier to receive a reply from other interconnected copiers when the main copier includes information of the other interconnected printers in the interconnected copying request. The above is an example of receiving a reply by the main copier from another external apparatus if the

information of the other apparatus is included in the interconnected request; see col. 7, ln 50 - col. 8, ln 48); and

transferring the print data instructed by said print instruction data to said another external apparatus if said reply is received (i.e. in the system, the main copier sends a request for status information of copiers connected to the main copier. Once a request has been replied to by the respective copiers, the main copier can determine which copier best suits the needs of the job and transfer print data instructed by the interconnected print mode, considered as the print instruction data, to the other connected copiers in the system; see col. 7, ln 50 - col. 8, ln 48).

Therefore, in view of Kayano '747, it would have been obvious to one of ordinary skill at the time the invention was made to have the feature of receiving a reply from said another external apparatus if the information of said another external apparatus is included and transferring the print data instructed by said print instruction data to said another external apparatus if said reply is received incorporated in the device of Roosen, as modified by the features of Estavillo, in order to have a printing device send image data to other apparatuses for printing (as stated in Kayano '747 col. 8, ln 27-48).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAD DICKERSON whose telephone number is (571)270-1351. The examiner can normally be reached on Mon. thru Thur. 9:00-6:30 Fri. 9:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler Haskins can be reached on (571)-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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